

Bioaccumulation Framework

History:

- Previously a Tier III evaluation
- Many existing BTs based on bioassay data rather than bioaccumulative pathways
- Recent DMMP updates for several key chemicals – PCBs, TBT, dioxins
- BCOC list recently updated by DMMP agencies
- BTs not yet available for most of the BCOCs, and pathway/endpoint evaluations may be incomplete for some existing BTs

Bioaccumulation Framework

Overall bioaccumulation Framework:

- Establish “reason to believe” based on source proximity and existing data on tissues and sediments
- Establish TTLs for three pathways:
 - Protection of human health
 - Protection of aquatic mammals and birds
 - Protection of fish and invertebrates
- Subsequently establish Sediment BTs – likely region or disposal-site specific

Bioaccumulation Framework

- Interim SEF presents **framework** as well as **recommended equations** and methodologies for each pathway
- **TTLs/BTs** currently under development – comparison to reference in the meantime
- Any existing **regional BTs** will remain in place until BTs can be updated (2 yrs)

Bioaccumulation Framework

Progress this year:

- Input parameters and approach to human health and wildlife TTLs agreed on
- Human health TTLs calculated and being checked against MDLs and background
- Wildlife TTLs in progress
- Bioaccumulation data gathered and being entered
- Statistical methods for identifying reference area concentrations have been reviewed and are under discussion
- Reference areas and project regions are being compiled for development of area-specific BCoC lists
- Pellston Workshop held to discuss tissue residue methods; will be incorporated as soon as available
- Participating in dioxin/Puget Sound discussions

Bioaccumulation Framework

For SMARM '08/SEF '08:

- Draft human health TTLs
- Draft wildlife TTLs
- Bioaccumulation database
- Reference area screening concentrations (to the extent data allow)
- Regional BCoC lists (to the extent data allow)
- Fish tissue TRCs? – depends on the method selected

For '09:

- Methods for calculating sediment BTs